

IN THE CLAIMS

Please amend the claims as follows:

1. (Original) Receiver for processing a received signal (SEQ), said receiver being multimode, characterized in that it comprises:
  - a single RF chip for processing the received signal (SEQ) in any mode, said chip comprising a spreading section (SPREAD\_SEC) for spreading and down-converting to baseband a received signal (SEQ) and a channel filtering section (CH\_SEC) for DC offsets rejection on a received signal (SEQ), and
  - a single baseband chip (BB) comprising despreading means (DSPR) for despreading a spread signal (SEQ).
2. (Original) Receiver for processing a received signal (SEQ) as claimed in claim 1, characterized in that the spreading section (SPREAD\_SEC) is adapted to produce a spread spectrum oscillator (LO) and a spreading sequence (PN), in order to expand the bandwidth of a received signal (SEQ).
3. (Original) Receiver for processing a received signal (SEQ) as claimed in claim 1, characterized in that the spreading section (SPREAD\_SEC) further comprises unique rejection means (LPF3) for all the modes for suppressing the adjacent carrier frequencies of the associated received signals (SEQ).
4. (Original) Receiver for processing a received signal (SEQ) as claimed in claim 1, characterized in that the channel filtering section (CH\_SEC) is common for all the modes.

5. (Original) Receiver for processing a received signal (SEQ) as claimed in claim 1, characterized in that the channel filtering section (CH\_SEC) comprises:
  - a block of low-noise amplifier (LNA) and associated mixers (M1&M2) for each mode, and
  - unique first rejection means (HPF1) for rejecting DC offsets on a spread received signal (SEQ) for any mode.
6. (Original) Receiver for processing a received signal (SEQ) as claimed in claim 5, characterized in that the channel filtering section (CH\_SEC) further comprises adding means (ADD1,ADD2) for redirecting a spread received signal (SEQ) coming from a block of low-noise amplifier (LNA) and associated mixers (M1&M2) to the first rejection means (HPF1).
7. (Original) Receiver for processing a received signal (SEQ) as claimed in claim 1, characterized in that the baseband chip (BB\_INT) further comprises:
  - channel filter coefficient banks (FIR) with associated filters (BB\_LPF) for each mode for rejecting adjacent carrier frequencies on the associated spread received signal (SEQ), and
  - a matching filter (IIR) for producing the same distortion of a spread signal (SEQ) on a corresponding despreading sequence (PN).
8. (Original) Receiver for processing a received signal (SEQ) as claimed in claim 1, characterized in that the despreading means (DSPR) comprise:
  - a single multiplier (M), and
  - a single correlator with integration and dump means (I&D).

9. (Original) Receiver for processing a received signal (SEQ) as claimed in claim 1, characterized in that the baseband chip (BB\_INT) further comprises synchronization means (SYNC) for synchronizing a spread signal (SEQ) with a corresponding despreading sequence (PN).
10. (Original) A method for receiving a signal (SEQ) in any mode, characterized in that it comprises the steps of:
- spreading and down-converting the received signal (SEQ) to baseband,
  - rejecting the DC offsets on the received signal (SEQ), and
  - despreading the spread signal (SEQ).
11. (Original) A method for receiving a signal (SEQ) as claimed in claim 10, characterized in that it comprises also a step of producing a spread spectrum oscillator (LO) and a spreading sequence (PN) in order to expand the bandwidth of the received signal (SEQ).
12. (Currently Amended) Mobile phone comprising a receiver as claimed in claim 1 ~~any one of the claims 1 to 9~~.